

Professor Garrett P. Serviss.

But even more surprising is the superiority of the Deloncle object glass in the focal length of its lenses. The great Yerkes glass brings the light of a star to a focus at a distance of 70-odd feet; the Deloncle glass carries the rays of light 150 feet before they are all converged at a common point to make an image of the star, or of the moon or sun. In the matter of magnifying power there is a vast advantage in this great focal length. The same eye-piece that would magnify the

For the purposes of public exhibition the eye-piece end of the great tube will terminate in an exhibition hall, and it is the intention to throw the image of such a bright object as the moon direct from the telescope upon a screen, where hundreds can see it at a time. The image of the moon as it comes from the tube, without magnification with an eye-piece, will be nearly two feet in diameter. All the mountain ranges, craters, rings, mountains, the rugged chasms and sea-like plains of the moon will be seen as in a picture. On account of the great quantity of light gathered by the immense object glass it is probable that it will be possible considerably to magnify the image of the moon on the screen, giving it a diameter of, say, twenty or thirty feet, and in that case an astonishing display of

The Yerkes telescope has an object-

More nearly affecting the earth's inhabitants by community of interest are the mysteries of the planets, and

The Delconco glass now offers us 50 per cent more light and 100 per cent more magnifying power for the solution of the mystery. Unfortunately Mars will not be in a specially favorable position for study next year, but in a few years it will come round again, closer to the earth, and then the utmost powers of the new glass can be applied to it.

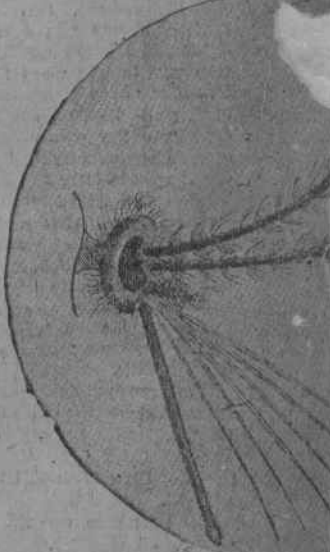
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that of Mars. She is our nearer neighbor, and our true comrade in size and situation. Some of the best observations ever obtained of her were made

The transmitter is also a plate into which are inserted a number of keys or thumb-screws like the keys which turn on or off an electric light. At each key is a word or an order corresponding to a similar word

In practical operation, suppose the captain wishes to give a particular order by means of the transmitter and the indicator. The transmitter will be placed at the option of the captain on the bridge or in the conning tower. The ship is cleared for action. He wants to give the order, "Commence firing." He turns the key of

It has chosen its commanders, enlisted its men, equipped the force and sent it forth to do battle at Sierra Leone, which, because of its pestiferous climate, is del-



Here Are the Barbed Lancets
She Puts Them To